

GUSSAK, V.B.

Using humic and polymer preparations on Sierozems for soil
structure improvement and erosion control. Pochvovedenie
no.8:42-53 Ag '61. (MIRA 14:11)

1. Institut pochvovedeniya, Tashkent.
(Sierozem soils)
(Soil conditioners)

GUSSAK, V.B.

E.D. Rozhdestvenskii's book "Physical and technological properties of the loess soils of Uzbekistan". Reviewed by V.B.Gussak. Izv. AN Uz.SSR Ser.tekh.nauk no.5:82-86 '61.
(MIRA 14:11)

1. Institut pochvovedeniya Ministerstva sel'skogo khozyaystva
UzSSR.

(Uzbekistan—Loess)
(Rozhdestvenskii, E.D.)

GUSSAK, V.B.; PAGANYAS, K.P.

Some results of four years old experiments on the aggregation
of irrigated typical Chernozem soils. Pochvovedenie no.5:
73-83 My '64. (MIRA 17:9)

1. Institut pochvovedeniya, Tashkent.

YAKHONTOV, Vsevolod Dmitriyevich; GUSSAKOVSKAYA, O.N., red.

[Following the Cherskii trail wildlife stories] Tropoiu
Cherkogo; rasskazy o prirode. Magadan, Magadanskoe
knizhnoe izd-vo, 1965. 77 p. (MIRA 18:10)

IVLEV, Fedor Dmitriyevich; GUSSAKOVSKAYA, O.N., red.; FEDOROVA, V.V.,
tekhn. red.

[What milkmaids have to say; based on the materials of the
First Provincial Conference of Milkmaids, March 7-8, 1960.
in Magadan] Rasskazyvaiut doiarki; po materialam Pervogo ob-
lastnogo soveshchaniia doiarak, prokhodivshego 7-8 marta 1960
goda v g. Magadane. Magadanskoe knizhnoe izd-vo, 1960.
(Magadan Province—Dairying) (MIRA 14:12)

VROMSKIY, Boris Ivanovich; GUSSAKOVSKAYA, O.N., red.; FEDOROVA, V.V.,
tekhn. red.

[Along the paths of the taiga; memoirs of a geologist] Po
taezhnym tropam; zapiski geologa. Magadan, Magadanskoe
knizhnoe izd-vo, 1960. 123 p. (MIRA 15:2)
(Taigas)

KANDROR, Iosif Solomonovich, prof., doktor biolog.nauk; KHLYPALOV, M.P.,
spatsred.; GELLERSHTEYN, V.I., red.; GUSSAKOVSKAYA, O.N., red.;
FEDOROVA, V.V., tekhn.red.

[Man in the Far North] Chelovek na Severe. Magadan, Magadanskoe
knizhnoe izd-vo, 1960. 55 p. (MIRA 14:4)

1. Institut obshchey i komunal'noy gigiyeny AN SSSR (for Kandror).
(RUSSIA, NORTHERN--MAN--INFLUENCE OF CLIMATE)

TIKHOMIROV, Boris Anatol'yevich; PIVNIK, Sarra Abramovna;
GUSSAKOVSKAYA, O.N., red.; FEDOROVA, V.V., tekhn. red.

[*Pinus pumila*; biology and utilization] Kedrovyyi stlanik;
biologiya i ispol'zovanie. Magadan, Magadanskoe knizhnoe
izd-vo, 1961. 35 p. (MIRA 15:8)
(Pine)

SAVREY, Vladlen Sergeyevich; SHEPELEV, Igor' Timofeyevich; GUSSAKOVSKAYA,
O.N., red.; FEDOROVA, V.V., tekhn. red.

[Automatic control in the mining industry] Avtomatika v gornoi pro-
myshlennosti. Magadan, Magadanskoe khizhnoe izd-vo, 1961. 92 p.
(MIRA 14:9)

(Magadan Province—Mining engineering—Equipment and supplies)
(Automatic control)

GROMOV, Leonid Vasil'yevich; GUSSAKOVSKAYA, O.N., red.; FEDOROVA, V.V.,
tekhn. red.

[Wrangel Island; popular science study] Ostrov Vrangelia; nauchno-
populiarnyi ocherk. Magadan, Magadanskoe knizhnoe izd-vo, 1961.
94 p.

(MIRA 14:11)

(Wrangel Island--Discovery and exploration)
(Wrangel Island--Economic geography)

KAZAKOV, Boris Ignatyevich, Ph.D., University, U.S.S.R., Prof.

[Metals tell their story] Metalnye russkazivayut o reche.
Magadan, Magadan'skoe knizhnoe izd-vo, 1962. 143 p.
(MDRA 1749)

POTAPENKO, Vladimir Vasil'yevich; LUBTY, Konstantin Ivanovich;
GUSSAKOVSKAYA, G.L., red.

[Improving the underground mining of sands] Sovershen-
stvovanie podzemnoi dobychi peskov. Magadan, Magadanskoe
knizhnoe izd-vo, 1964. 99 p. (MIRA 17:10)

GUSSAKOVSKIY, V.V.

A new species of the genus Phylletoma fall. found in Georgia (Hymenoptera,
Tenthredinidae). Seob.AN Gruz, SSR 8 no.3:179-181 '47. (MIRA 9:7)

1. Akademiya nauk Gruzinской SSR, Zoologicheskiy institut, Tbilisi.
Predstavleno deystvitel'nym chленом Akademii F.A. Zaytsevym
(Georgia--Sawflies)

GUSSAKOVSKIY, V.V.

New and little known species of Psammocharidae and Sphecidae
(Hymenoptera) of western Tajikistan. Trudy Zool.inst. 10:199-288
'52. (MLRA 7:4)
(Tajikistan--Hymenoptera) (Hymenoptera--Tajikistan)

22253
R/008/60/000/005/014/014
A231/A126

16.5⁰⁰

AUTHOR:

Gussef, L., (Bulgarian People's Republic)

TITLE:

On some geometric properties of the principal inertia axes

PERIODICAL: Studii și Cercetări de Mecanică Aplicată, no. 5, 1960, 1303 -
1309

TEXT: According to a mechanical theorem, the central principal inertia axis of a plane figure is its principal inertia axis for each of its points. The present paper treats the problem of relative principal inertia axes at the poles which do not belong to one of the central principal inertia axes. The corollary forms a simple geometrical method for their construction. (F) is a certain plane figure with an Oct center of gravity, single central principal inertia axes ox, oy, indicated in such a way that $I_x > I_y$; I_x and I_y indicating the inertia moments of (F) in relation to these axes. The system of elliptic coordinates E (μ_1, μ_2) into which the XOY orthogonal system is transformed by the equations

$$\frac{x^2}{a^2+\mu_1} - \frac{y^2}{b^2+\mu_2} = 1 = 0 \quad (\mu_1 \neq -a^2, \mu_2 \neq -b^2) \quad (1)$$

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is called the system of inertia coordinates E_I for (F) , if

$$a^2 = \frac{I_x}{F}, \quad b^2 = \frac{I_y}{F}, \quad (a^2 > b^2),$$

in which F is the area of the figure (F) . The curves passing through the $M(x, y)$ point determined by (1) are called coordinate curves of inertia of (F) . Two curves, an ellipse and a hyperbola, having the same focuses $C_1(0, -\sqrt{a^2 - b^2})$, and $C_2(0, +\sqrt{a^2 - b^2})$ independent from M are passing through each pole. Thus, the system E is orthogonal (Fig. 1). C_1 and C_2 characteristic for the figure (F) are called inertia forces. The following theorem has been established: The directions of the coordinate curves of inertia, by passing through a given pole, are the directions of the principal inertia axes of the relative figure at the considered pole. $M(x, y)$ is an arbitrary pole in which $x \neq 0, y \neq 0$. The inertia moments and the centrifugal moment in relation to the MX and MY orthogonal axes (Fig. 1) have the values expressed by

$$I_{zuv} = xyF \neq 0, \quad (2)$$

$$\begin{cases} I_{ux} = I_x + y^2F = F(a^2 + y^2), \\ I_{uy} = I_y + x^2F = F(b^2 + x^2). \end{cases} \quad (3)$$

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In equation

$$\psi(x, y) \equiv (a^2 + \mu)(b^2 + \mu) - x^2(b^2 + \mu) - y^2(a^2 + \mu) = 0, \quad (7)$$

the values for $x \neq 0$ ($y=0$) can be immediately found. On the basis of initial suppositions it is found that $\mu \neq -a^2$ and $\mu \neq -b^2$, so that the equation (7) can be transformed to the equation

$$\operatorname{tg}(\varphi + q_1 \pi) = \frac{a^2 + \mu}{b^2 + \mu} \cdot \frac{y}{x} \quad (q_1 = 0, \pm 1, \pm 2, \dots) \quad (9)$$

which determines the direction of the principal axes of inertia. By knowing the real numbers μ_ξ and μ_η of every M pole, the author obtains for $I_{\xi\eta}$ the equation

$$I_{\xi\eta} = F(r^2 - \mu_{\xi\eta}). \quad (10)$$

By an intermediate expression the XOX system is transformed into a system of inertia coordinates. The coordinate curves of inertia passing through M (μ_ξ , μ_η) are given by

$$\frac{x^2}{a^2 + \mu_\xi} + \frac{y^2}{b^2 + \mu_\xi} - 1 = 0 \rightarrow \frac{x^2}{\alpha_\xi^2} - \frac{y^2}{\beta_\xi^2} = 1$$

$$\frac{x^2}{a^2 + \mu_\eta} + \frac{y^2}{b^2 + \mu_\eta} - 1 = 0 \rightarrow \frac{x^2}{\alpha_\eta^2} + \frac{y^2}{\beta_\eta^2} = 1 \quad (11)$$

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The directions of the coordinate curves in M are determined by $\varphi = \hat{\epsilon} + \frac{\pi}{2}$, if $k = 0$, and $\varphi_{ij} = \theta_{ij}$; $\varphi_{ij} = \hat{\epsilon}_{ij}$, if the system E is orthogonal. Thus, the direction $\hat{\epsilon}_{ij}$ of the elliptic coordinate curves determines the direction ϵ_{ij} of the principal axes of inertia of (F) in relation to which the inertia moment is the largest, and the direction $\hat{\epsilon}_{ij}$ of the hyperbolic coordinate curves determines the direction ϵ_{ij} of the principal axes of inertia of (F), at a ratio by which the inertia moment is smallest. The author then establishes two corollaries: corollary no. 1: with $C_1M = C_1$ and $C_2M = C_2$, in which C_1 and C_2 are inertia focuses of (F), he deduces an equation, which shows that the geometric locus of the poles represents Cassini's curve, having as focuses the C_1 and C_2 inertia focuses. Thus, every figure has poles at which all axes are principal which can be considered as inertia focuses of the figure. These poles are single; corollary no. 2: with M(x, y), considered to be a pole with the coordinates $y = 0$, $x = 0$. The coordinate curves of inertia passing through M will be: $x = 0$ and $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$. For the E system the Oy-axis is a limit element of the coordinate curves of the M poles ($x=0$, $y=0$). Thus, for every pole, the M($x/\sqrt{a^2-b^2}$, $y=0$) parts of the OX axis are limit elements of the coordinate curves in the E systems.

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By adding to the coordinate curves of inertia their limit elements and the OX, OY axes, it can be seen that all suppositions are correct, also for the poles of the principal central axes of inertia, with the exception of the C_1 and C_2 focuses, whose coordinate curves of inertia generally are non-determinable. According to corollary no. 1, however, it is possible to determine the relative principal axes of inertia at C_1 and C_2 in such a way, that the conclusions would be correct also for these poles. The OX axis and the straight line passing through the focus and being parallel to the OY axis are considered to be the relative principal axes of (F). If $I_x = I_y (a^2 = b^2)$, $C_1 = C_2 = 0$, one obtains a special case in which the XOY cartesian coordinate system is transformed into a polar system. There are 2 figures and 2 non-Soviet-bloc references.

SUBMITTED: December 16, 1959

Card 5/6

UMNOVA, M.A.; PRIVALOVA, L.I.; GUSSEYNOV, Ch.S.; TSPPA, L.S.

Immunological activity in patients with Werlhof's disease.
Probl. gemat. i perel. krovi 8 no.12;25-27 D '63.

(MIRA 17:9)

1. Iz TSentral'nogo ordena Lenina instituta hematologii i
prelivaniya krovi (dir.- dotsent A.Ye. Kiselev).

GUSSI, G.

"Convex functions and Orlicz spaces" by M.A. Krasnoselskii,
I.A. B. Rutickii. Reviewed by G. Gussi. Rev math pures
7 no. 4:724-725 '62.

GUSSI, G.

"Mathematics methods for the physical sciences" by L.
Schwartz. Reviewed by G. Gussi. Rev math pures 7
no. 4:725-726 '62.

GUSSI, G.

"Qualitative theory of differential equations" by V.V.
Nemytskii, V.V. Stepanov. Reviewed by G. Gussi. Rev
math pures 8 no. 2:330 '63.

P. U.S.S.R. 6-6-1969

Foias, Gérard; Gussi, George; and Poenaru, Valentin.
Sur la méthode pour les équations différentielles
linéaires du second ordre. Acte R. P. Réunion Bul-
l. Acad. Sci. USSR, Math., 7, 1963, 121. (Russian and
French summaries)

1 - 19/17

Let y be a solution of a linear, homogeneous differential equation with constant coefficients and let r_1, r_2 be two real roots of $y(x)$. De La Vallée Poussin has shown [1, Math. Pures Appl. (9) 8 (1929), 128-144] that there exists a method consisting in proving first that h is a continuous function with respect to $A(x)$. This permits one to approximate $A(t)$ uniformly over the closed interval $[a, b]$, by its sequence of Bernstein polynomials and to approximate two independent solutions also by polynomials of two sequences, $P_k(x)$ and $Q_k(x)$. For a given h , the least distance between consecutive zeros of $y(x) = C_1 P_k(x) + C_2 Q_k(x)$ is the common root h of

$$\frac{P_k(x+h)}{Q_k(x+h)} = \frac{P_k(x)}{Q_k(x)}$$

and of

$$\frac{d}{dx} \left\{ \frac{P_k(x+h)}{Q_k(x+h)} \right\} = \frac{d}{dx} \left\{ \frac{P_k(x)}{Q_k(x)} \right\}.$$

F0145. CIPRIAN; Gross, George

Eliminating x , one obtains an equation in h ; its smallest root r such that the root x of $y(x)$ and $x+r$ both belong to (a, b) is then taken as the approximation h_k of h . A very detailed investigation is made, in order to ascertain that the value h_k so obtained satisfies $|h - h_k| < \epsilon$, with any preassigned $\epsilon > 0$. It is asserted (following Joukowsky) that if $A(x)$ is periodic, of period ω , the solutions of the differential equation stay bounded at infinity, provided that $\omega < h$.

E. Grosswald (Philadelphia, Pa.).

GUSSI, G.

SUBJECT USSR/MATHEMATICS/Differential equations CARD 1/3 PG - 727
 AUTHOR GUSSI G., POENARU V., FOJAS K.
 TITLE The direct method for the treatment of the Cauchy problem for
 quasilinear hyperbolic equations of two independent variables.
 PERIODICAL Doklady Akad. Nauk 112, 381-382 (1957)
 reviewed 5/1957

The Cauchy problem for the equation

$$(1) \quad \frac{\partial^2 u}{\partial x^2} - \frac{\partial^2 u}{\partial y^2} = f(x, y, u, \frac{\partial u}{\partial x}, \frac{\partial u}{\partial y})$$

is reduced to the Cauchy problem for the equation

$$(2) \quad \tilde{\square} u = f(x, y, u, \frac{\partial u}{\partial x}, \frac{\partial u}{\partial y})$$

by introduction of Bögel's hyperbolic operator

$$\tilde{\square} u = \lim_{h, k \rightarrow 0} \frac{u(x+h+k, y+h-k) - u(x+h, y+h) - u(x+k, y-k) + u(x, y)}{hk}$$

A solution of (2) is sought which satisfies the conditions

Doklady Akad. Nauk 112, 381-382 (1957)

CARD 2/3 PG - 727

$$u(x,0) = \varphi(x) + \frac{\partial}{\partial y} (u - \frac{\varphi(x+y) + \varphi(x-y)}{2}) \Big|_{y=0} = \psi(x).$$

Here φ and ψ belong to the class of functions C^0 if f does not depend explicitly on $\frac{\partial u}{\partial x}$, $\frac{\partial u}{\partial y}$; while otherwise φ belongs to the class of functions C^1 . Let the function $\omega(z)$ be of the type 0 if $\int_0^\infty \frac{dz}{\omega(z)} = \infty$ and of the type ∞ if $\int_{\gamma>0}^\infty \frac{dz}{\omega(z)} = \infty$.

Theorem 1: If f is continuous and

$$|f(x,y,u,v,w) - f(x,y,u',v',w')| \leq K(y) \omega(|v-v'| + |w-w'|)$$

where $K(y)$ is summable and $\omega(z)$ is of the type 0, then there exists a solution of the Cauchy problem for (2).

Theorem 2: If $|f(x,y,u,v,w) - f(x,y,u',v',w')| \leq K(y) \omega(|u-u'| + |v-v'| + |w-w'|)$, $K(y)$ is summable and $\omega(z)$ is of the type 0, then there exists at most one solution.

Doklady Akad. Nauk 112, 581-582 (1957)

CARD 3/3

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Theorem 3: If the conditions of the theorems 1 and 2 are satisfied, then the Cauchy problem is correct.

Theorem 4: If beside of the conditions of theorem 3 the initial values for all x are defined and $|f(x,y,u,v,w)| \leq K_1(y) \omega, (|u| + |v| + |w|)$, where $K_1(y)$ is summable on every finite interval and $\omega_1(z)$ belongs to the type W , then the solution can be continued in the whole plane.

Theorem 5: If beside of the conditions of theorem 4 the function K_1 is summable on the whole axis, the initial values are uniformly bounded and

$$\int_{-\infty}^{+\infty} |\psi(\xi)| d\xi < +\infty, \text{ then the solution is bounded in the whole plane.}$$

Theorem 6: If the conditions of theorem 4 are valid and K is summable on the whole axis, then the solution is stable in the sense of Ljapunov.

GUSSI, G.; FOIAS, C.; POENARU, V.

On th generalized solutions of certain linear and quasilinear equations in the Banach space. In French. p. 283.

REVUE DE MATHÉMATIQUES PURES ET APPLIQUÉES. JOURNAL OF PURE AND APPLIED MATHEMATICS. (Academia Republicii Populare Romine) Bucuresti. Rumania. Vol. 3, no. 2, 1958.

Monthly List of East European Accessions (EAL) LC Vol. 9, no. 1, January 1960.
UNCL

AUTHOR:

Foyash, Ch., Gussi, G., Poyenaru, V.

20-119-5-11/59

TITLE:

Generalized Solutions of a Quasilinear Differential Equation in
the Banach Space (Obobshchennyye resheniya kvasilineynogo
differentsial'nogo uravneniya v banakhovom prostranstve)
SSSR

PERIODICAL: Doklady Akademii Nauk, 1958, Vol 119, Nr 5, pp 884-887 (USSR)

ABSTRACT: In the Banach space X the differential equations

$$(1) \quad \frac{dx}{dt} = A(t)x$$

and

$$(2) \quad \frac{dx}{dt} = A(t)x + f(t,x)$$

are considered, where $A(t)$ are linear closed operators with
regions of definition being dense in X . The authors investigate
the existence and uniqueness of the solution of the Cauchy
problem (in the generalized sense) for (1) and (2) respectively.
According to the assumptions for $A(t)$ and $f(t,x)$ different
assertions are obtained. The results partially overlap with the
results of Kato [Ref 1] and Krasnosel'skiy [Ref 5,6,9].
There are 10 references, 6 of which are Soviet, 2 Japanese,
1 American, 1 German.

Card 1/2

Generalized Solutions of a Quasilinear Differential Equation in
the Banach Space 20-119-5-11/59

PRESENTED: November 26, 1957, by S.L.Sobolev, Academician

SUBMITTED: October 7, 1957

Card 2/2

FOIAS, C.; GUSSI, G. (Bucarest)

The Cauchy problem for systems of partial derivation equations
with dependent coefficients of time. Bull math Rum 4 no.1:
39-44'60.

GUSSI, G.

"Ordinary differential equations" by Friedhelm Erwe. Reviewed by G.
Gussi. Rev math pures 8 no.4:714 '63.

GUSSI, G.

"Studies in mathematical analysis and related topics; essays in honor of George Polya.", Edited by Gabor Szegö and others.
Rev math Roum 9 no.4*377-378 *64

GUSSON, Boris Borisovich

Results of testing cotton varieties at state testing stations in
the Turkmen S.S.R. from 1947 to 1954] Svodnye resul'taty sorto-
ispytaniia khlopchatnika po gossortouchastkam Turkmenskoi SSR za
1947-1954 godu. Ashkhabad, Akademiiia nauk Turkmenskoi SSR.
1956. 64 p. (MERA 10:11)

(Turkmenistan--Cotton--Varieties)

GUSSOV, V. V.

"From the History of Transcendental Functions in Russia and the USSR." Sub 7 Mar
51, Sci Res Inst of Mechanics and Mathematics, Moscow Order of Lenin State U imeni
M. V. Lomonosov

Dissertations presented for science and engineering degrees in Moscow during 1951.

SOR Sum. №. 480, 9 May 55

Cand., Physico-mathematical Sci.

BAKHMUTSKAYA, E.Ya. (Khar'kov); PRUDNIKOV, V.Ye. (Moscow); ROSSINSKIY, S.D.
(Moscow); DEPMAN, I.Ya. (Leningrad); SHOSTAK, R.Ya. (Moscow);
FIKHTENGOL'TS, G.M. (Leningrad); SPASSKIY, I.G. (Leningrad); GUSSOV, V.V.
(Vladivostok); RYBKIN, G.F., redaktor; YUSHKEVICH, A.P., redaktor.

[Historical studies in mathematics. Vol. 5] Istoriko-matematicheskie
issledovaniia. Moskva, Gos. izd-vo tekhniko-teoreticheskoi lit-ry, 1952.
(MLRA 6:5)
472 p. Vol. 5.

I. Moscow. Universitet. Seminar po istorii matematiki.
(Mathematics) (Osipovskii, Timofei Fedorovich, 1765-1832)
(Peterson, Karl Mikhailovich, 1828-1881) (Letnikov, Aleksei
Vasil'evich, 1837-1888)

GUSSOV, V.V.

Development of the theory of cylindrical functions in Russia and
the U.S.S.R. Ist.-mat. issl. no.6:355-475 '53. (MLR 7:9)
(Bessel's functions)

GUST, Cristian, ing.; SAAL, Carol, ing.

Urban transportation of persons in the town of Brasov, Rumania.
Rev transport 10 no.2:65-75 F '63.

GUST, Christian; SAAL, Carol (Brasov), lector

Utilization of semiconductor rectifiers in electrified
urban transports. Electrotehnica 11 no.10:369-375 0'63.

1. Inginer proiectant principal la Directia de sistematizare,
arhitectura si proiectare a construcțiilor, Brasov
(for Gust). 2. Institutul Politehnic, Brasov (for Saal).

GUST, C., ing.; SAAL, C., ing.

Designing the modernization of urban passenger transportation;
aspects of the city of Brasov. Rev transport 9 no. 6:260-269
Je '62.

GUSTAB, Erik

Economic evaluation and control of the performance of
technical development plans. Podnik organizace 17 no.3:
105-108 Mr '63.

1. Ministerstvo všeobecného strojírenství.

GUSTAB, Erik

Economic analysis of the new technology of large-scale production.
Podn org 18 no.7:306-308 Jl '64.

1. Ministry of General Mechanical Engineering.

STREDA, A.; WEISZER, L.; GUSTAFIK, St.

Asymmetrical incidence and the size of syndesmophytes in spondylarthritis ankylopoietica of the thoracic spine. Cesk. rentgenol. 16 no.3: 190-194 Je '62.

1. Vyzkumny ustav chorob revmaticych v Praze, reditel prof. dr. F. Lenoch Cs. st. kusele, Trencianske Teplice, riaditel L. Spiska.
(SPONDYLITIS ANKYLOSING radiog)

GUSTAFIK, S.; WEISZER, L.

Electrodermatography during balneotherapy. Fysiat. vestn. 43 no.5:
268-274 S '65.

l. Cs. statne kúpele v Trenčianskych Tepliciach (riaditeľ MUDr.
L. Spiska).

GUSTAINS'Y, A.N.; NEMNINOV, S.A.

L_{III}-absorption spectra of antimony and K-absorption spectra
of phosphorus in Al_{III}B_V type binary semiconducting compounds.
Izv. AN SSSR. Ser. fiz. 28 no. 5:922-933 My '64. (MIRA 17:6)

1. Institut fiziki metallov AN SSSR.

Journal of Polymers, 24, 11-14 (1982) (English summary).—Sodium hydroxide (900 ml. 23% soln.), 4 g. KMnO₄ and 4 g. CuSO₄·5H₂O stirred together and cooled to 5°, 100 g. of iso-AmOH is added simultaneously with portion of Cl, keeping the soln. violet at all times and the temp. between 10 and 15° and the mixt. alk. The MnO₂ filtered off and the filtrate acidified with 20% H₂SO₄ and extracted 4 times with C₆HCl₄ to give 81% of 93% pure isovaleric acid.

Verner Jacobsen

GUSTAV E.

Some 4-(hydroxymethyl)flavazoles. B. Gudzik (Mora-
Pharmaceutical, Zagreb, Yugoslavia). Int. J. Pharm. 10,
1982 (English summary).—A no. of 4,5-disubstituted
(substituents = Rand R', resp.) derivs. of 2-methylbenzazole (I)
were prep'd. α -Acetamido- β -hydroxypropiophenone (II) (4 g.)
in 20 ml. Ac₂O and 15 ml. conc. H₂SO₄, left standing overnight,
heated 0.5 hr., poured on ice, neutralized with NH₃, and extd.
with ether to give I (R = Ph, R' = AcOCH₃) (III) 33%, color-
less oil, bp 170-5°. III (0.47 g.) boiled 3 hr. with 5 ml. 2N
H₂SO₄, cooled, and neutralized with NH₃, to give 110% I (R =
Ph, R' = HOCH₂) (IV), white crystals, sol. in H₂O-EtOH and
C₆H₆, m. 123.5-4°. β -Nitro- α -acetamido- β -hydroxypro-
piophenone (0.6 g.) in 3 ml. Ac₂O and 1.6 ml. concd. H₂SO₄
was heated 2 min., poured on ice, neutralized with NH₃,
gave 83.8% I (R = p -NO₂C₆H₄, R' = AcOCH₃) (V), sol. in
H₂O-EtOH, EtOAc, silty, yellow needles, m. 140.8-41°.
II (1.5 g.), 12 ml. Ac₂O, and 6 ml. concd. H₂SO₄, left standing
overnight, then 1.8 ml. concd. HNO₃ added, gave 76%
V. V (0.35 g.) refluxed 2 hrs. with 3N H₂SO₄, gave 81%
I (R = p -NO₂C₆H₄, R' = HOCH₂) (VI), sol. in AcOEt, m.
190.5°. β -Nitro- α -acetamidoacetophenone (0.44 g.) was
boiled with 3 ml. Ac₂O and 1.5 ml. concd. H₂SO₄, 2 min.,
cooled, mixed with 20 ml. H₂O, neutralized with NH₃, gave
100% VI (R = NO₂C₆H₄, R' = H) (VII), sol. in EtOH-H₂O,
EtOAc, yellow needles, m. 162.5°. 2-Methyl-5-phenyl-
oxazole (0.2 g.) titrated with 15 ml. concd. H₂SO₄ and 2 ml.
conc. HNO₃ below 5°, then raised with ice and NH₃,
gave 61% VII. Werner Jacobson

GUSTAK, E

✓ Synthesis of 3,3'-oxydi-*p*-phenylene Malonone. E. Gustak and A. Marjanović-Tomić ("Filira", Zagreb, Yugoslavia). - *J. Am. Chem. Soc.*, 77, 125-30 (1955) (in English). - Anhyd. SnCl_4

(50 g.) in 200 ml. Et_2O add. with HCl treated with 8 g. $\text{O}(\text{C}_2\text{H}_5\text{R}-4)$ (I) ($\text{R} = \text{NC}$) in 28 ml. CHCl_3 , kept overnight, the liquid decanted, and the ppt. boiled 10-15 min. with 100 ml. 5% HCl, the dark oil which sepd. extd. with three 50-ml. portions of CHCl_3 , and the ext. washed 3 times with H_2O , then with NaHCO_3 soln., dried, and evapd. left 4.5 g. I ($\text{R} = \text{CHO}$) (la), m. 84-0°; analytical sample, m. 84-0° (from CaH_2 -petr. ether 2:1); dioxime, m. 158° (from CaH_2); bis(2,4-dinitrophenylhydrazone), m. 210-2° (from PhNO_2). la (2.9 g.), 4.8 g. $\text{BzNHCH}_2\text{CO}_2\text{H}$, 2.2 g. NaOAc , and 20 ml. Ac_2O heated 15 min. on a H_2O bath, cooled, 50 ml. H_2O added, the mixt. kept 1 hr., and the crystals filtered off and washed with H_2O , EtOH , and Et_2O yielded 4.8 g.

E. Gustak

crude I ($R = CH_2COOCPh_2N$) (II), m. 251-5°, analytical sample, m. 265-6° (decompn.) (from C_6H_6). II (1.4 g.), refluxed with 0.23 g. NaOH in 15 ml. 70% EtOH, neutralized with 5% HCl, and cooled yielded 1.4 g. I [R = $CH_2C(CO_2H)NH_2$] (III), m. 243°, analytical sample, m. 230-1° (from $H_2O-EtOH$ 1:3). II (2 g.) in 150 ml. anhyd. EtOH and 10 ml. concd. H_2SO_4 refluxed 30 min., 80 ml. EtOH distd. off, the residue poured into 500 ml. H_2O , the mixt. extd. with four 100-ml. portions of Et_2O , and the exts. dried and evapd. left 1.6 g. I [R = $CH_2C(CO_2Et)NH_2$] (IV), m. 145-50°; analytical sample, m. 153-4.5° (from $C_6H_6-Et_2O$). IV (0.75 g.), 4.05 ml. III (d. 1.7), and 1 g. red P refluxed 1.5 hrs., filtered hot, the filtrate evapd. *in vacuo*, addn. of 10 cc. H_2O and evapn. *in vacuo* repeated 3 times, the residue dissolved in 20 ml. H_2O , extd. with Et_2O , filtered, and boiled, neutralized with hot NaOAc soln., cooled, and the crystals filtered off and washed with H_2O , EtOH, and Et_2O , gave 0.2 g. I [R = $CH_2CH(CO_2H)NH_2$] (V), did not melt up to 300° and gave a pos. ninhydrin test. V was prepd. also by a similar treatment of II or III with a yield of 60.5% and 54.5%, resp. V.2HCl, decomp. 300° (from EtOH-Et₂O, 2:1); di-Bz deriv. of V, m. 232-3° (from EtOH).

E. Gustak

2/2
PM

GUSTAK, Gyula, dr.

Surgery of uterine cervix cancer. Magy. noorv. lap. 19 no.2:117-121
Mar. 56

1. A medgyesi Szuleszeti es Nogyogyoszati Egyesitett Karhaz
(Romania)

(CERVIX, UTERINE, neoplasms
surg., statist. of 50 cases (Hun))

GUSTAK, M.

137-58-1-2056

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 278 (USSR)

AUTHOR: Gustak, Miroslav

TITLE: The Significance of Radiodeflectoscopy in Crane Building
(Znacheniye radiodefektoskopii v kranostroyenii)

PERIODICAL: Chekhosl. tyazh.prom-st', 1957, Nr 2, pp 40-45

ABSTRACT: The use of γ -deflectoscopy in crane building makes it possible to effect economies, to improve dependability in operation, and to reduce structural weight by more efficient utilization of the properties of the metal. The most practicable method of inspection of welded joints in cranes is irradiation by γ rays employing the isotopes Ir¹⁹² and Cs¹³⁷. An example of inspection of the frame of a crane truck is presented.

G. N.

1. Cranes—Construction 2. Radiodeflectoscopy—Applications

Card 1/1

GUSTAV-MASER, L.

A. Keggydionium salts of some barbituric acid esteride
Author: V. Hahn, Z. Kucharsky, I. Guibit-Madek and R.

GUSTALO, V. A.

25593 GUTSALO, B. A. Predvychislenie Gidrografov Stoka Dlyan Bol'shikh
Bisseynov. Trudy Kievsk. Nauch-issled Gidrol. Observatorii Ugms
USSR, Vyp. 4, 1949 S. 34-64- Bibliogr; 12 Nazv

So: Letopis' Zhurnal 'nykh Statey', Vol. 34, Moskva, 1949

GUSTALYUK, V.G.; KUSAKOV, M.M.

Surface activity of petroleum and of its components. Izv.AN Kazakh.
SSR. Ser.khim.no.8:122-132 '55. (MIRA 9:4)
(Surface tension) (Petroleum research)

GUSTAV, K.

GUSTAV, K. Technology of fine ceramics. p. 203

Vol. 6, no. 8, Aug. 1956
SKLAR A KERAMIK
TECHNOLOGY
Praha, Czechoslovakia

So: East European Accession Vol. 6, no. 2, 1957

SMOLYANSKAYA, P.G.; GUSTAVINA, L.M.

Photocolorimetric detection of morphine in an opium-benzoin infusion.
Trudy Len.khim.-farm.inst. no.13:279-282 '62. (MIRA 15 10)
(MORPHINE) (COLORIMETRY)

GUSTAVSON, Kh.A., fel'sher (Tallin)

Fel'dsher in the polyclinic. Fel'd. i akush. 26 no. 3:43-45 Mr
'61. (MIRA 14:3)
(MEDICAL CARE)

USSR

2365. ANALYTICAL DETERMINATION OF CETANE NUMBER OF DIESEL FUELS
Gustavson, F. (Archiv Ken., 1951, vol. 23, 232-248; abstr. in Chem.
Abstr., 1954, vol. 48, 12386, 12397). A relation between the cetane
number of diesel fuels determined in a test engine and physical properties
has been found. The ignition power of twelve test fuels expressed as
octane number k was different for the HWA (German Army Ordnance Dept) and
the CFR engine. The HWA engine was used to determine k of twenty three
fuels with known d_{20} , n_D , specific paraffin (I) and boiling number (the
sum of distillation temperatures for 5, 15, 25-95% overhead divided by
10). I was directly proportional to d and n_D , and also to k for fuels of
equal boiling number. Calibration curves are given for determining k
from the boiling number and any one of the physical constants mentioned.

C.A.

MUSTAVAC, I.

"A study of a petrochemical plant." p. 1. (REDAKCIJA INDUSTRIJI, vol. 2, no. 1, 1953,
Zagreb.)

SC: Monthly List of East European Accessions, Vol. 2, #8, Library of Congress
August, 1953, Uncl.

GRUJANOVIC, R.

"A study of a petrochemical plant," p. 37. (ZAVRJA U PRAVILJU, Vol. I, no. 2, 1953, Zagreb.)

SG: Monthly List of East European Acquisitions, Vol. 2, #3, Library of Congress
August, 1953, Uncl.

MURAVJČIĆ, I.

"Ammonia synthesis, coal or gas base?" p. 105. (ME IJA S HRVATSKIM, Vol. 1, no. 4, 1953, Zagreb.)

SO: Monthly List of East European Acquisitions, Vol. 2, #3, Library of Congress
August, 1953, Uncl.

"Magnesium, rival to petroleum."
Kemija U Industriji, Zagreb, Vol 3, No 1, Jan 1954, p. 23

30: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

"Processing and refining naphtha."
Kemija U Industriji, Zagreb, Vol 3, No 1, Jan 1954, p. 23

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

GRIFFITHS, P.

"Synthesis of world petroleum."
Kemija I Industriji, Vol 3, No 1, Jan 1954, p. 24

SO: Eastern European Acquisitions List, Vol 3, No 10, Oct 1954, Lib. of Congress

GUSTING, E.

"Technological problems of the production of synthesis oil ammonia. p. 5,
(KEMIJA U INDUSTRiji, Vol. 3, No. 2/3, Febr./ Mar. 1954, Zagreb,
Yugoslavia)

SO: Monthly List of East European Acquisitions, (EAL), LC, Vol. 3,
No. 12, Dec. 1954, Unclassified.

"Nitro-hosphate or superphosphate?"
Kemija U Industriji, Arhiv, Vol 3, No 4, Apr. 1954, p. 117

CC: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

GUSTAVSON, P.

GUSTAVSON, P. 4th World Petroleum Congress.

Vol. 4, No. 7, July 1955 KEMIJA U INDUSTRIJI

SO:Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No.3
March, 1956

GUSTAVSON, P.

GUSTAVSON, P. Cumol, propene tetramer, and polymeric benzine from the same plant.
p. 186
Kutritan, domestic synthetic tannin. p. 188

Vol. 4, No. 9, Sept, 1955

KEMIJA U INDUSTRiji

SO: Monthly List of East European Accessions, (EEAL), IC, Vol. 5 No. 3
March, 1956

GUSTAVSON, R.

Vis., RAK VATEK AND F. C. SE PERSONAL CHEMICAL INDUSTRY (IN YUGOSLAVIA).
GUSTAVSON, R. (RECORDED) July 1977 1977. THE
CIA IS NOT IDENTIFIED AS AN AGENT OF THE UNITED STATES.
ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED
DATE 11-11-01 BY SP/144

LPH

GUSTAVSON, P.

Yugoslavia/Chemical Technology -- Chemical Products and Their Application. Nitrogen Industry, I-3

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1388

Author: Gustavson, P.

Institution: None

Title: Some Problems in the Removal of the Heat Evolved During the Synthesis of Ammonia

Original Periodical: Kemija u industriji, 1956, Vol 5, No 1, 1-5; Croatian (summaries in German, French, and English)

Abstract: Various means of reducing the temperature in the catalyst bed during the synthesis of ammonia are discussed. The calculations which are presented show that the production of steam with the heat evolved during that reaction increases the energy consumption in the compression of the gas, hence offers no economic advantage.

Card 1/1

1-2
Yugoslavia /Chemical Technology. Chemical Products
and Their Application

I-2

Chemico-technological problems of
atomic engineering

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31206

Author : Gustavson Per

Title : Atomic Fuels and Fission Products

Orig Pub: Kemija u industriji, 1956, 5, No 10, 247-269

Abstract: A review. Raw material sources of U- and Th-fuels, processing of fission products and use of the latter in chemical industry and in other branches of science and engineering. Bibliography 13 references.

Card 1/1

P. GUSTAVSON

✓ 1831. Raw materials for petrochemical industry. P. Gustavson. Nefte (Yugoslavia). MFG. 7 (6), 211-15. The problem of providing gaseous olefins for Yugoslav chemical industry is discussed. Sufficient quantities of propylene and butylene will be available from one cracking plants. The production of ethylene for this purpose in a separate plant would not be profitable, as the requirements of the chemical industry are too small. (Author's abstract.)

JM
JW

GUSTAVSON, P.

Raw materials and procedures for obtaining hydrogen. p. 744.
TEHNIKA (Savaz inzenjera i tehnika Jugoslavije) Beograd.
Vol. 11, no. 5, 1956

SOURCE: East Europe Accessions Lists (EEAL),
Library of Congress, Vol. 5, no. 11, Nov. 1956

YUGOSLAVIA/Chemical Technology. Chemical Products and Their
Applications. General

H-1

Abs Jour : Ref Zhur - Khim., 1958, No 24, No 81323

Author : Gustavson P.

Inst : -

Title : Certain Problems Involved in the Further Chemical Develop-
ment of Yugoslavia

Orig Pub : Kemija u industriji, 1957, 6, No 1, 5-8

Abstract : Review. Problems involved in the present status and in the
future development of the C₂H₂ and oil refining industries,
manufacture of plastics, synthetic fibers, and of
synthetic fertilizers are covered.- Ye. Stefanovskiy

Card : 1/1

YUGOSLAVIA/Chemical Technology. Chemical Products and Their
Application, Part 3. - Treatment of Natural Gases
and Mineral Oils, Motor and Rocket Fuel, Lubricants.

H

Abs Jour: Referat. Zhurnal Khimiya, No 21, 1958, 71967.

Author : Per. Gustavson.

Inst : Upon The Development of the Oil-Chemical Industry in
Yugoslavia.

Orig Pub: Kemija u industriji, 1957, 6, No 5, 145-149.

Abstract: It is noted that Yugoslavia is in possession of
mineral oil, natural gas, coal and other raw
materials for the organic synthesis industry. A
review of the most important synthesis products
and industry branches, in which these raw materials

Card : 1/2

94

YUG/2-58-12-5/19

AUTHOR: Gustavson, Per., Doctor of Engineering (Zagreb)

TITLE: Some Questions Concerning the Establishment of the Petrochemical Industry (Neka pitanja podizanja petrokemijske industrije). III. Olefin Production (- Dobivanje olefina)

PERIODICAL: Kemija u industriji, 1958, Nr 12, pp 319 - 329

ABSTRACT: The author deals with the problems of olefin production, with particular reference to the prospects in Yugoslavia. The sources for deriving olefins are discussed and dismissed except for pyrolytic methods. Conditions are listed under which the production of pure olefins (ethylene, propylene, butylene) from gaseous mixtures is economically advisable, the method in each case depending on the particular olefin required and the degree of purity stipulated. Essentially, however, the petrochemical industry must be developed along the lines of hydrocarbon pyrolysis. Acetylene and "aromatic distillate", by-products of the pyrolytic process, are so much undesirable ballast and must be removed. Pyrolysis may be carried out by: 1) pipe-still method, 2) the cyclic process in chambers lined with re-

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Some Questions Concerning the Establishment of the Petrochemical Industry
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fractory material and with regenerator heating, 3) the "moving bed" method for heavier fuels. Light fuels are preferred to heavier raw materials since they yield more gas and less by-products. Ethylene will be the main pyrolysis product, propylene and butylene being produced only in small quantities. The effects of temperature, duration of reaction and pressure on the process are discussed. Catalysts are undesirable here. The percentage yield of pyrolysis products is listed for various raw materials (propane, butane, benzine, etc.). In Yugoslavia an olefin installation would need a capacity of 20,000 tons of olefins a year. The article lists the necessary amounts of the various raw materials required to guarantee this capacity. Methods of hydrocarbon pyrolysis suitable to each fuel are reviewed and their production capacities compared. On the basis of an economic analysis carried out by the Tehnološko-ekonomsko biro za kemiju industriju (Technological-Economic Bureau for the Chemical Industry), Zagreb, the author concludes that the only practical raw materials for this purpose are: heavy benzine, fuel oil and crude petroleum. Ethylene could be extracted from

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YUG/2-58-12-5/19

Some Questions Concerning the Establishment of the Petrochemical Industry

fermentative spirit as a temporary solution to the problem. In spite of their much higher cost it would be more economical to produce olefins from the lighter raw materials. The only feasible methods are those based on refinery gas, crude petroleum or its residues, while for Yugoslavian conditions the Hoechst coking process is most suitable. Other methods are enumerated which may be made feasible by a change in the prices of raw materials. There are 8 tables and 21 references of which 2 are Yugoslavian, 2 English, 1 Dutch and 16 American.

Card 3/3

GUSTAVSON, P.

Some problems related to the establishment of petrochemical industries.
IV. Selection of the process for the synthesis of phenol.

KEMIJA U INDUSTRiji. (Drustvo kemicara-tehnologa NHR) Zagreb, Yugoslavia,
Vol. 8, no. 2, Feb. 1959.

6

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 6,
June 1959.

Uncl.

GUSTAVSON, T.

Yugoslavia (430)

Technology

New development in the field of softeners. p. 41.
KEMIJA U INDUSTRIJI, Vol. 1, no. 2, 1952.

East European Accessions List, Library of Congress,
Vol. 1, no. 14, Dec. 1952. UNCLASSIFIED.

GUSTAW, K.

5
2 May

Electrometric adsorption analysis of certain colorless compounds. Krystyna Gustaw (Univ. Krakow, Poland). *Zeszyty Nauk. Univ. Jagiel. Ser. Nauk Mat.-Przyrod., Mat., Fiz., Chem.* No. 2, 125-50 (1958) (English summary). — Expts. are described on chromatographic sepn. of Brockmann or chem. pure Al_2O_3 or silica gel, of palmitic or oleic acids from stearic acid, and of EtOH excts. from *Bulldonna* and *Datura stramonium*. EtOH-ligroine, and EtOH-ligroine-water mixts. were used as solvent and eluent. The eluate was examt. by an Sb adsorption microelectrode (cf. B. Kamienski, C.I. 51, 2418a). Acids were sepd. when dild. to 0.001M concns. Atropine was sepd. from hyoscyamine. J. Stecki

WISCHMANN, H.

"Electrostatic adsorption analysis of some colorless compounds; a thesis. n. hq.
(VIADÓ OSZI "E. WOZNIAK". Vol. II, no. 1, Jan. 1957. Grodzian, Poland.)

SO: Monthly List of East European Acquisitions (EMEL) '61. Vol. 5, no. 02, Dec. 1957.
Incl.

ABRAMOV, V.N., inzh.; GUSTAYTIS, B.S.

Industrial testing of a high-pressure OM-2M axial pump, Trudy
VNIIGidrourgii no.4:80-85 '64. (MIRA 18:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proektno-konstruktorskiy institut dobychi uglya gidravlicheskim sposobom.

BUDNITSKAYA, R., nauchnyy sotrudnik; VAN'KEVICH, V., nauchnyy sotrudnik;
GUSTER, V., nauchnyy sotrudnik

Improve the quality of prepacked butter. Sov. torg. 33 no.8:31-33
Ag '59. (MIRA 12:11)

1. Nauchno-issledovatel'skiy institut torgovli i obshchestvennogo
pitaniya (NIITOP).
(Butter trade)

GUSTERIN, G. A.

"Changes in the Gastric Evacuatory Function Caused by Perigastritis of
Ulcerous Origin," Terap. arkhiv., 21, No.3, 1949.

Hosp. Therapeutic Clinic, Leningrad Pediatric Med. Inst.

GUSTERIN, G. A.

"Conference on Use of Radioactive Cobalt for Therapeutic Purposes," Vest. Rent.
i Rad., No.5, pp 88-94, 1953

Summary W
Translation M-31328, 30 Jun 55

GUSTERIN, G.A.

Review of the work of the conference on the treatment of erythremia
and leucoses with radioactive phosphorus. Vest. rent. i rad. no.4:
87-94 Jl-Ag '54. (MLRA 7:10)

(ERYTHREMIA) (LEUCOSIS)
(PHOSPHORUS--THERAPEUTIC USE)

GUSTINOV, L. A.
NEYMARK, I.O., professor; GUSTINOV, G.A.

Clinical characteristics of deforming perigastritis and pathogenesis
of associated insufficiency of gastric evacuation. Terap. arkh. 26
no.2:61-68 Mr-Ap '54. (MIRA 7:8)

1. Iz gospital'noy terapevticheskoy kliniki Leningradskogo pediatri-
cheskogo meditsinskogo instituta (dir. prof. M.E.Mandel'shtam)
(STOMACH, diseases,
*perigastritis with disord. of evacuation)

GUSTERIN, G.A.

Review of works from a conference on therapeutic use of radioactive phosphorus in skin diseases. Vest.rent. i med. no.3:107-111 My-Je '55. (MLRA 8:10)

(SKIN, diseases,
ther., radiophosphorus, conf.)
(PHOSPHORUS, radioactive,
ther. of skin dis.)

GUSTERIN, G.A.

"On Reactions of the Endocrine System to the Action of Ionizing Radiation," by G. A. Gusterin, Meditinskaya Radiologiya, Vol 2, No 1, Jan/Feb 57, pp 82-85

Summaries are given of approximately 24 reports on the above subject presented from 31 May to 2 June 1956 at the Conference on the Study of the Reactions of the Endocrine System to the Action of Ionizing Radiation in Leningrad, organized by the Central Scientific Research Roentgeno-Radiological Institute of the Ministry of Health USSR in conjunction with the Institute of Evolutionary Physiology of the Academy of Sciences USSR.

Examples of reports summarized follow: "Reaction of Some Endocrine Organs to General Single and Repeated Irradiation With Radioactive Cobalt From an External Source," "Morphological Changes of Endocrine Glands in Radiation Injuries," "On the Causes of the Disturbance of the Estrus Cycle in Mice Subjected to X-Irradiation," and "On the Effect of Steriod Estrogen Hormones on Radiosensitivity." (U)

SUM. 1345

POBEDINSKIY, M.N., prof., red.; GUSTERIN, G.A., starshiy nauchnyy sotrudnik;
STRASHININ, A.I., starshiy nauchnyy sotrudnik; PELESHUK, P.S.,
tekhn.red.

[Fortieth anniversary of the Central Radiological Research
Institute of the Ministry of Public Health of the U.S.S.R.]
40 let Tsentral'nogo nauchno-issledovatel'skogo rentgeno-
radiologicheskogo instituta Ministerstva zdravookhranenia
SSSR. Pod red. M.N.Pobedinskogo, G.A.Gusterina i A.I.Stra-
shinina. Leningrad, 1958. 193 p. (MIRA 13:1)

1. Leningrad. Tsentral'nyy nauchno-issledovatel'skiy rentgeno-
radiologicheskiy institut.
(LENINGRAD--RADIOLOGY, MEDICAL)

POBEDINSKIY, M.N.; GUSTERIN, G.A.; STRASHININ, A.I.

Conference of the Central Roentgen and Radiological Research
Institute of the Ministry of Public Health of the U.S.S.R. to
discuss problems in medical radiology. Med.rad. 4 no.1:87-91
Ja '59. (MIRA 12:2)

(RADIOLOGY, MEDICAL)

GUSTERIN, G.A.

Work of a meeting on radiobiology and the physics of ionizing
radiations, held in Leningrad. Med.rad. 4 no.2:87-91 F '59.
(MIRA 12:4)

(RADIOBIOLOGY--CONGRESSES)

GUSTERIN, G.A.

Leningrad city-wide conference on medical radiology. Med.rad.
(MIRA 12:8)
4 no.6:95-96 Je '59.
(RADIOLOGY, MEDICAL)

GUSTERIN, G.A.

On trends in the development of scientific studies on certain current problems in radiobiology. Med.rad. 4 no.11:92-95 N '59.

(RADIOLOGY)
(BIOLOGY)

(MIRA 13:2)

POBEDINSKIY, Mikhail Nikolayevich, prof., red.; GUSTERIN, Georgiy
Adrianovich, red.; STRASHININ, Aleksandr Ivanovich, red.;
PELESHUK, P.S., tekhn.red.

[Problems in clinical radiology; transactions of the Central Research Institute of Medical Radiology] Voprosy klinicheskoi radiologii; trudy TSentral'nogo nauchno-issledovatel'skogo instituta meditsinskoi radiologii Ministerstva zdravookhraneniya SSSR. Pod red. M.N.Pobedinskogo, G.A.Gusterina i A.I.Strashinina. Leningrad, 1960. 321 p. (MIRA 14:3)

1. TSentral'nyy nauchno-issledovatel'skiy institut meditsinskoy radiologii.

(RADIOLOGY, MEDICAL)

CIA-RDP86-00513R000617620017-1

sov/5435

Kiselev, P. N., Professor, G. A. Gusterin, and A. I. Strashinin, Eds.
Voprosy radiobiologii. t. III: Spornik trudov, posvyashchenny 60-letiyu so
dnya rozhdeniya Professora M. N. Pobedinskogo (Problems in Radiation Biology.
v. 3: A Collection of Works Dedicated to the Sixtieth Birthday of Professor
Mikhail N[ikolayevich] Pobedinskiy [Doctor of Medicine]) Leningrad.
Tsentr. n-issl. int-med. radiologii M-va zdravookhraneniya SSSR, 1960.
422 p. 1,500 copies printed.
Tech. Ed.: P. S. Peleshuk.
PURPOSE: This collection of articles is intended for radiobiologists.
COVERAGE: The book contains 49 articles dealing with pathogenesis, prophylaxis,
and therapy of radiation diseases. Individual articles describe investigations
of the biological effects of radiation carried out by workers of the Central
Scientific Research Institute for Medical Radiology of the Ministry of Public
Health, USSR. [Tsentral'nyy nauchno-issledovatel'skiy institut meditsinskoy
radiologii Ministerstva zdravookhraneniya SSSR] during 1958-59. The following

Problems in Radiation Biology (Cont.)

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topics are covered: various aspects of primary effects of radiation; the course of some metabolic processes in animals subjected to ionizing radiation; reactions in irradiated organisms; morphologic changes in radiation disease; and reparation and regeneration of tissues injured by irradiation. Some articles give attention to the effectiveness of experimental medical treatments. No personalities are mentioned. References accompany almost all of the articles.

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| Zedgenidze, G. A., [Member, Academy of Medical Sciences USSR], Ye. A. Zherbin, K. V. Ivanov, and F. R. Vaynshteyn. Hormonal Activity of the Adrenal Cortex in Acute Radiation Sickness and the Effect of Desoxycorticosterone Acetate on the Disease | 11 |
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Problems in Radiation Biology (Cont.)

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1. PETROV, K. D.; GUSTEVA, C. K.
2. USSR (600)
4. Ethylene Oxide
7. Reaction of dimethylolurea with ethylene oxide, Zhur. ob. khim., 22, No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.